DOCUMENT RESUME

ED 213 755 TM 820 179

AUTHOR Firestone, William A.; Wilson, Bruce L.
TITLE Political and Technical Linkage: The Contribution of Regional Agencies.
INSTITUTION Research for Better Schools, Inc., Philadelphia, Pa.
SPONS AGENCY National Inst. of Education (ED), Washington, D.C.
PUB DATE Dec 81
NOTE 26p.; Paper presented at the Annual Meeting of the American Educational Research Association (66th, New York, NY, March 19-23, 1982).

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Educational Change; *Educational Policy; Elementary Secondary Education; *Linking Agents; *State School District Relationship; *Technical Assistance
IDENTIFIERS New Jersey; Pennsylvania; *Regional Educational Service Agencies

ABSTRACT

Regional Educational Service Agencies (RESAs)--agencies between the state and local level--are an important resource for helping local educators cope with a variety of pressures from an increasingly complex environment. They do so by performing two functions. Political linkage provides knowledge about the impacts of mandates on specific districts and helps negotiate acceptable interpretations. Technical linkage entails learning research- and practice-based knowledge about instruction and administration. This paper describes how field staff from RESAs in two states (New Jersey and Pennsylvania) perform three roles--trainer, liaison, and monitor that contribute to each kind of linkage. Findings from an analysis of data from 138 field agents in 23 RESAs indicates that trainers focus on technical linkage while monitors emphasize political linkage. Liaison types provide both linkages. The study also indicates how state policy helps determine the kind of linkage provided. (Author/GK)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED213755

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

W. A. Firestone

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

POLITICAL AND TECHNICAL LINKAGE:

THE CONTRIBUTION OF REGIONAL EDUCATIONAL AGENCIES

William A. Firestone

Bruce L. Wilson

December, 1981

The preparation of this paper was supported by funds from the National Institute of Fducation. The opinions expressed do not necessarily reflect the position or policy of NIE and no official endorsement should be inferred. We would also like to thank our colleagues Ward Mason, Judy Dawson, Dick Corbett, Karen Louis, John Connolly and Keith Kershner for their helpful comments on an earlier draft of this paper.

ABSTRACT

Regional Educational Service Agencies (RESAs)--agencies between the state and local level--are an important resource for helping local educators cope with a variety of pressures from an increasingly complex environment. They do so by performing two functions. Political linkage provides knowledge about the impacts of mandates on specific districts and helps negotiate acceptable interpretations. Technical linkage entails learning research- and practice-based knowledge about instruction and administration.

This paper describes how field staff from RESAs in two states perform three roles--trainer, liaison, and monitor that contribute to each kind of linkage. Findings from an analysis of data from 138 field agents in 23 RESAs indicates that trainers focus on technical linkage while monitors emphasize political linkage. Liaison types provide both linkages. The study also indicates how state policy helps determine the kind of linkage provided.

POLITICAL AND TECHNICAL LINKAGE:

THE CONTRIBUTION OF REGIONAL EDUCATIONAL SERVICE AGENCIES

American school districts operate in a complex environment which consists not only of their local communities but a variety of state and national institutions as well. These latter institutions provide at least two kinds of inputs. One consists of new technical knowledge embodied in textbooks, curricula, newsletters, journals, and various kinds of training programs. Political inputs consist of legislation and regulation. Compliance with these regulations is a necessary condition for receiving financial support in some instances and the legitimacy that is crucial for organizations, especially those in the public sector, on all occasions.

As this environment becomes more complex local districts find coping with it increasingly more difficult. Fortunately, in the last twenty years a new set of agencies has grown up to help school districts cope with this environment (Stephens, 1979). These Regional Educational Service Agencies (RESAs) usually serve a portion of the state. They often hire a staff of field agents who help districts keep track of new technical and political developments in education. However, very little is known about how they operate.

This paper reports on an exploratory study initiated to examine how RESAs in two states facilitate linkage between local districts and sources of technical knowledge. However, as the study progressed, we discovered that the political linkages these RESAs help make were equally important. The following sections show how different kinds of linkages relate to three strategies for promoting educational change, describe the growth of the RESAs in America and the systems of agencies in this study, and then present findings about how these agencies contribute to linkages.

Change Strategies and Kinds of Linkage

A decade ago, Sieber (1972) identified three major strategies for promoting educational change. Two of these are voluntary while the third is more coercive. The Rational Man strategy relies on logical argumentation, the provision of information, and the development of technically sound products to persuade the local educator to adopt more effective practices. Much of the work in curriculum development over the last thirty years employed this strategy. Reviewing the history of these efforts, Atkin and House (1981) conclude that the biggest change has not been any change in instructional practice at the local level but rather a growing role for the federal government in education. In the science curriculum area, Welch (1979, p. 301) concludes that "General Patton. . . described the situation accurately when he wrote, 'weapons change but man who uses them changes not at all. . . ' The curriculum development projects developed many new weapons, but little change is noted in classrooms."

The Cooperator strategy relies on the development of interpersonal relationships to create a motivation to change. This strategy is embodied in change efforts that make use of human linking agents to help local educators identify knowledge needs or design and implement change projects. In the last fifteen years, the federal government sponsored a number of demonstration programs using such human agents. Reviews of the evaluations of these programs and comparisons with other programs that do not use human helpers indicate that the use of such individuals is an effective way to promote change (see Emrick and Peterson, 1978 and Louis, 1981).

The third strategy, the Powerless Functionary approach, relies on legal coercion through the enforcement of laws and regulations to induce change. Although most attention has been given to federal legislation, local districts are legally created and authorized by state government (Wirt, 1977) so the states have great potential to regulate education. Traditionally, this influence has been in the areas of finance and general organization through consolidation legislation. In the '70s, however, the states have attempted to regulate a broader range of issues relating to internal management and instructional practice (Wise, 1979). There has been very little effort to examine how these regulations are implemented, how states monitor compliance with legislation, how they cope with noncompliance, or even how they communicate new expectations for performance (Murphy, 1980).

Examination of federal enforcement efforts suggests that while they have some important impacts--they produce relatively little change in instructional practice (Boyd, 1978; Pauly, 1978). One reason for the limited impact of the Powerless Functionary strategy has been that the functionaries are not powerless. When the federal desegregation legislation and Title I were implemented, it quickly became apparent that local educators and politicians had the power to thwart full enforcement and even to affect the budgets of enforcing agencies (McLaughlin, 1978; Murphy, 1971; Orfield, 1969).

The existence of these change strategies suggests that human agents in RESAs can perform two linkage functions: political and technical. Following Havelock (1969) we see both kinds of linkage as boundary spanning activities between school districts and other agencies. However, political and technical linkages differ in two ways. The first refers to the content that is transmitted between agencies. Technical linkages deal primarily with knowledge of curriculum and instructional practice: what should be taught and how. It is often based on disciplined inquiry and is subject to a variety of truth and utility tests (Weiss and Bucuvalas, 1980). Political linkages deal with knowledge about regulations and legislation: what decisions are being considered and which outcomes are likely, what decisions have been made and what they mean, and--most important--what opportunities and constraints do these decisions create for local actors? The two kinds of linkage also emphasize different processes. Technical linkages entail learning and selecting: identifying new practices or concepts, selecting ideas for local use, and developing the skills to put them into practice. Political linkages are marked by a process of clarification and negotiation as individuals try to ensure that the most

advantageous interpretation of a mandate is made both while it is being formulated and as it is being implemented and enforced.

As we have described these change strategies, technical linkage embodies the techniques of the Cooperator strategy but often to transmit the knowledge generated through the Rational Man strategy. The Powerless Functionary strategy is different from, but creates a need for, political linkage. That is, enforcement efforts and responses to them create a need for someone to negotiate between those charged with enforcing the law and those who are being regulated. The two kinds of linkage may also appear in the same situation or be mutually reinforcing. For instance, requirements that school districts implement minimum competency programs or new planning models generate a need for new technical knowledge. On the other hand, those providing technical linkage services may find limited interest in their services until new mandates create a "need" (Firestone and Wilson, 1981).

The utility of technical linkage for promoting change and the neeed for political linkage that results from the increased regulation of education raises a question about where such linkage services can be found. Most past research on people providing technical linkage was done through evaluations of federally funded dissemination programs, many of which have been temporary systems. Federal investment in such dissemination efforts is likely to decline precipitously in the next few years. There has been little examination of the sources of political linkage. Individuals providing both kinds of assistance must find a permanent home. RESAs--which represent a tier of institutions between the local and state level that is often state supported--seem to provide a useful and potentially viable location. It remains to be seen, however, whether one agency can provide both kinds of linkage. Thus, it is useful to know if RESAs currently have staff who provide these political and technical linkage services to schools.

Regional Educational Service Agencies

Regional Educational Service Agencies are located between the state and local levels, usually to provide assistance to local school districts. They typically exist because of the passage of state authorizing or enabling legislation. As a result, depending on state legislation, they may enter into service agreements with school districts and employ staff who serve as human agents. Yin and Gwaltney (1981) point out five potential advantages of these agencies for providing technical linkages that may apply to political linkages as well. First, since they serve several school districts, they can provide economies of scale. Second, as service oriented agencies close to local districts, they are likely to excell other kinds of agencies, such as university research groups, in providing such linkages. Third, since every state can have such agencies, they have broad applicability. Fourth, they have political and bureaucratic legitimacy as a part of the system that nonprofit organizations typically do not. Finally, from a federal perspective, they are usually basically supported by state and local funds although they often receive some federal support.

In one sense, RESAs have been a part of American education since the flowering of the common school movement. The first such agencies were the county offices founded in Delaware in 1829 (Knezevich, 1969). The county offices that developed in the 19th century were rarely service oriented. However, the role of these offices changed as the number of school districts dropped from over 127,000 in 1932 to around 17,000 in 1971 (Stephens, 1979). The modern development of RESAs began in 1948 with the formation of New York's Boards of Coorporative Educational Services (BOCES). In the 60's, several states including Michigan and Pennsylvania converted their administratively oriented county office systems to more service oriented RESAs. In other states, such as Texas, new systems were started from scratch.

The agencies in this study include the Intermediate Units (IUs) of Pennsylvania and the Education Improvement Centers (EICs) and County Offices in New Jersey.[1]

Pennsylvania's 29 IUs were formed in 1970 when the state's county offices were reorganized after a massive program of school district consolidation. The have a broad mission to perform special education, curriculum development, educational planning and a avariety of other services. In addition they may offer any other services agreed to by a majority of school boards in the regions served (Dario, 1976). Over 80% of IU budgets in the '70s were for the operation of special education programs; special education funds go to IUs rather than directly to school districts in Pennsylvania. The average IU has 241 staff, and the largest portion of these people are special education teachers or supervisors. However, most IUs have from one to twelve individuals who can provide inservice programs to regional school districts, operate continuing educational programs for teachers, serve as consultants to curriculum development efforts, and coordinate contacts between the region and assorted state and federal educational agencies. The average IU serves a region of over 1600 square miles including 19 school districts.

New Jersey has a number of systems of RESAs, two of which provide linkages between school districts and other agencies. Its four Educational Improvement Centers (EICs) were formed between 1967 and 1975. They have the mission to "on request. . . provide support and assistance to local school districts and to members of teaching and administrative staff through the delivery of materials, techniques and expertise necessary to improve school programs and services" (State of New Jersey, Chapter 58, Laws of 1978). Thus their mission is narrower and focused more on technical linkages than is that of IUs. EIC staffs fluctuate considerably

---

[1] Because this research is being carried out as part of Research for Better Schools' mission to provide research and development services to the Pennsylvania, New Jersey, Delaware area, only states in that region with RESA systems were selected for the study.

because these agencies rely heavily on special program funds won competively from various federal and state agencies. In 1980, the average EIC had approximately 60 staff, half of whom served linking roles by offering workshops in a variety of content areas to school districts, providing technical assistance in those same areas, and operating a small resource center/library. The average EIC serves 148 school districts spread over 1,960 miles.

While the EICs and IUs have their own boards of directors, New Jersey's 21 County Offices operate as branch offices of the State Department of Education. In 1975, New Jersey passed its Thorough and Efficient education legislation (T&E) which required, among other things, that school districts follow a state mandated planning process and that schools achieve above minimum criterion levels on a state designed basic skills test (Wise, 1979). Should districts not meet these requirements, the state can take over operation of the district (New Jersey Board of Education, 1980). From 1975 through 1980, County Offices had the responsibility of monitoring school districts to ensure that they comply with state requirements. The average County Office has seven professionals, six of whom work in the field by visiting school to monitor compliance, responding to requests for information, and overseeing state career education, vocational education, and special education programs.

Data Collection

In the fall of 1980, site visits were made to 23 agencies: 11 IUs, two EICs, and 10 County Offices. These agencies were selected after consultation with state department staff and agency directors to ensure variation in size, population density, distribution throughout each state, and reputation for helping educators keep abreast of new knowledge relevant to their work. A major assumption based on previous research and substantiated by initial investigations was that the major means of providing linkages between local districts and external sources of knowledge and political constraint was contact between the district and individual field agents employed by the RESA. To learn about the linkage provided by the RESA, it was necessary to know what its field agents were doing. As a result, at each agency in addition to meeting with administrators, data was collected from three to 12 field agents. The agents were selected by the agency director after discussion with the research staff to clarify our definition of this role. In 17 agencies we collected data from all agents available, and in the rest more than half were included. Each field agent was interviewed for approximately an hour and asked to complete a questionnaire. Complete data were obtained from 138 field agents.

To examine the political and technical linkages provided by these agencies, we first identify three roles performed by these field agents. Next we use interview and survey data to show how different linkage functions are performed through each type of role. Finally, we show how the different roles are distributed among the 23 agencies.

Types of Field Agent Roles

There is a growing literature examining how external agents mediate between local educators and knowledge producers. One major theme in this literature has been an effort to identify the roles field agents play when working with educators. One empirical approach to this task is to give respondents a list of role descriptors and ask to what extent each is performed. Responses to these questions are then factor analyzed to determine whether sets of items come together in coherent roles similar to those predicted in the theoretical literature (Madey, 1979; Louis et al., 1981). This is essentially the procedure that we followed. Respondents were given a list of eleven items that come from previous role conceptualizations (e.g., Butler and Paisley, 1978) and from preliminary discussions with field agents.

A factor analysis of their responses suggests that field agents perform three distinct roles (Table 1). The first is labeled trainer/expert.

Table 1 about here

It includes items such as acting as a curriculum expert and designer, presenting workshops, and acting as a group process trainer. The last item was intended to tap organization development activities. However, interviews indicate that this work is rarely done by the field agents in these agencies so it seems likely that respondents emphasize the idea of providing training. The second factor refers to liaison activities such as identifying clients needs, finding resources--usually in the form of training but also including knowledge about legal matters--and bringing the resources and client together. The final factor consists of one item, "monitoring." This item refers to the activity of collecting data to make decisions on whether the school or district is complying with law and code.

To assess the validity of these roles, factor scores were compared to responses to a set of questions about how field agents spent their time. There are seventeen possible items. Of these the item "giving workshops" is the only one referring to expert/trainer activity exclusively; time spent in general liaison, helping schools assess needs, finding human resources, and finding materials all refer to liaison activities; and "monitoring schools/districts to insure that regulations are being followed" refers to monitoring. Generally, there is a good fit between the factor scores and reports of time use. Gammas range from .46 for liaison to .73 for trainer/expert and .98 for monitoring.

Although we speak of these roles as independent types of activity they are often combined in practice. To examine the amount of overlap, respondents were classified as high and low on each factor with the top third of each distribution established as the high group. Cross-tabulation of scores on all three factors shows that 37% of the respondents scored high on only one role type, 33% scored high on two, and less than one percent

(one person) scored high on all three. (For further examination of the compatibility of different roles, see Firestone and Wilson, 1981).

The Linkage Functions of Different Roles

This section indicates the linkage function associated with each role. In the process, it is necessary to introduce a second distinction having to do with the field person's "clientele." As boundary spanners, field staff often have divided loyalties, but some see themselves as working primarily for local school districts whereas others associate themselves more with the state. Figure 1 summarizes our views of the linkage functions played by each role. Expert/trainers emphasize technical linkage (although not exclusively) and see school districts as their clientele. Liaison staff also work primarily for school districts, but they combine political and technical linkage. Monitors stress political linkage, but they work for the state.

Figure 1 about here

Individuals' descriptions of their work during interviews illustrate how they carry out their linkage functions. Expert/trainers tend to be specialists in some content area who interact with local educators through workshops and consultations about technical problems:

> I am a specialist in bilingual education and English as a Second Language. . . I work with or assist any district, community agency or college. The range is from early childhood to university, for instance on the implementation of bilingual programs in day-care centers and elementary schools. . . I use two main strategies: workshops that are held at the (agency) or in the district or community and consultations and the (agency) or on site.
>
> 1337[2]

> I assist the local education agencies in any area I can in the area of reading from preschool to adult. I meet with core committees of Title IV-C project, help in implementation of the Pennsylvania Comprehensive Reading Program. . . I do inservice, consulting, grant proposals, workshops, and testing.
>
> 0335

While expert/trainer work provides technical linkage, it is affected by the political/regulatory environment of school districts. That is, districts often request training in order to comply with state or federal mandates as is true in the second case cited above. Thus field agents who

[2] Numbers refer to specific interviews. Interviews 0101-1199 are from IUs, 1201-1399 are from EICs, 1401-2399 are from County Offices.

do training say they "did the entire T&E series" of workshops for a district or "I am now doing Long Range Planning" with a district indicating that they are providing assistance with state mandated planning procedures.

Monitoring is more of a political linkage process. The emphasis is on enforcement, but monitors frequently find that "enforcing" is not a unilateral act. Rather it requires a good deal of negotiation and explaining. At times, it even involves a limited amount of technical linkage. People who do a great deal of monitoring say that their job is "to monitor, to look for compliance with law and code, state mandates and provisions of the T&E Law" (2333). In some cases, this requires giving direction:

> Coordinating basic skills and special services programs. The individual (in the district) assumed the coordinator's role for special services, but didn't work at doing it. . . We finally said, you must have a coordinator or the program won't be funded. They got a new coordinator.
>
> 1930

However, monitors often find that strict enforcement is not possible. As one says, "You can't hold it over their heads. You can't say, 'Its the law.' We show them alternative ways to do things" (1632). Strict enforcement may not be possible because the school district will seek support from some other source in the Department of Education or the legislature or because the competence to comply is simply lacking as the following instances indicates:

> The superintendent needed a lot of help with the annual report (required by the state). He had a lot of trouble getting things together and understanding what the state wants. He overcomplicates. We sent someone out to sit with him while he did it.
>
> 2135

In many cases, monitors deemphasize enforcement and seek to portray themselves working with school districts to help them cope with regulations:

> I try to help districts be in compliance with federal and state mandates. I assist school districts in identifying their roles to organize and be able to see where they are in the T&E process.
>
> 2130
>
> Personally, the monitoring aspect can be done because I am viewing it as a task of providing formative help to prevent problems.
>
> 1832

Although monitors work primarily with legal issues, technical knowledge may also be provided as a byproduct, as the following example indicates:

> The problem was that the LEA was using local criterion referenced assessment based on competencies, and their assessment was not proper in view of the (agency) because the items were unweighted. Monitoring Title I brought me in, and I saw the need. I told them about their assessment flaws and helped them change the system.

1832

Liaison work includes both technical and political linkage. It covers a broad range of activities needed to maintain a network of interactions among local districts, the RESA, and the outside world. Some of the interaction with school districts is intended to determine needs for technical knowledge as the following quote indicates:

> I have three (advisory committees). One is related to bilingual and English as a Second Language. The other one's related to career education and the other one is related to science education. And those are forums for. . . creating demands for services. And that's a two-way street. Hearing needs and addressing those needs with the services we provide. . . You have to be a better listener. You have to prod people to share with each other.

1035

Some of it is managing the flow of service:

> My major responsibility is. . . trying to match the need identified in local school districts with expertise in our own agency or a local university. I coordinate a continuing education program similar to that of a college.

0331

The liaison person's interaction with the outside world is with sources of both technical and legal knowledge. Thus, liaison people spend a good deal of time seeking experts to provide the training that their constituent school districts need for one reason or another. However, they also mediate between the districts and regulatory agencies, especially the state:

> I inform the board and superintendents of forthcoming legislation and its effects on their policies and programs. Also I get an audience for a particular superintendent or board president wit legislators regarding a unique district problem.

0233

We stand between state policies and interpret them. We have to soften these policies and assist the districts. Sometimes this involves handholding.

0934

To further sort out the linkage functions associated with each role type, a variety of data were examined to determine the content areas in which field agents worked, the specific activities they carried out, the intensity of their relationships wit their clients, the initiators of RESA activities for school districts, the sources of knowledge they use in their work, and the strategies they employ to deliver services. We identified 32 possible variables associated with these issues. Table 2 reports the results of the 12 variables where statistical differences exist among the three role types.[3] The analysis in this table involved a comparison of pure types (i.e., people who score high on one role and low on the other two) rather than just comparing those who score high on a role since it is possible to score high on more than one role.

Table 2 about here

Field agents work in five different content areas, three of which produce differences among the three pure role types. Curriculum, which includes reading, mathematics, social studies, and so forth is one area where one might turn to sources of technical knowledge--i.e., rational experts--to find out about the latest trend. The same is true of administration which includes leadership and supervision, guidance, personnel, and student management issues like attendance and discipline. Finally, legal issues refer directly to regulations set and enforced by state and federal agencies. These are matters for political linkage.

Interview responses indicate the overall pervasiveness of both political and technical linkages (Table 2, items a-c). Three-fifths of all field agents mention that their work includes legal issues and over half refer to curriculum in some way. Still, there are some important differences. More than twice as many trainers as monitors report working on curriculum issues while almost three times as many monitors mention legal issues. Liaison people fall in between for both curriculum and legal issues, although they tend to be more like monitors than trainers. At the same time, they mention administrative matters more often than either group.

[3] For the interval level data taken from survey items (Table 2, items g-k) an analysis of variance was performed. For the dichotomous data (mentioned/not mentioned) taken from the interviews, Chi-square tests were performed. Data in the table represent variables where the level of statistical significance was less than .05.

We identified five different activities from the interviews where we asked the respondents to describe what they did in their field agent role. Two of the three which produced statistically significant differences--conducting workshops and writing materials/proposals--stress providing technical knowledge to local educators although some political knowledge is included. These activities are usually conducted for schools, not the state. They are carried frequently; in fact, almost two-thirds of the field agents report that they give workshops (Table 2, item d). Trainers report doing these activities much more frequently than do monitors while liaison people are in between. The third activity which is conducted for the state is the same as one of the roles, monitoring. As would be expected, the pure monitors report doing almost four times as much monitoring as do trainers and even more than do field agents who specialize in liaison work.

The expert/trainer who interacts with a school district through workshops and consultations about technical problems has developed a specialized skill which suggests more of a long term commitment in working with school districts. Our data indicate that people who were identified as trainers are, indeed, engaged in more long-term projects with specific schools or districts. They report over four times as many long term projects (defined as three or more separate sessions with a school or district to work on one topic) as do monitors (Table 2, item g). Liaison people report almost as many long term relationships as do trainers.

The three kinds of field agent roles differ not only in the kind of linkage that is provided but in who initiates the interaction: the district, the RESA, or the state. In the questionnaire, field agents were asked what percent of their activities were initiated by the three different sources. People who do liaison work report initiation more themselves than do either trainers or monitors (Table 2, items h, i). Monitors initiate the least on their own. By contrast, monitors report that almost two-fifths of their contacts are initiated by the state.

To provide linkages, field staff must be in contact with elements of the outside world as well as local educators. To learn about those contacts, field agents were asked how often they turn to each of 18 different sources for information. Examination of these sources reveals three different sets to which field agents turn.[4] The first set is paper sources. These include newsletters, educational journals, curriculum materials, textbooks and technical reports all of which tend to stress knowledge from the technical sector. The second is personal sources--colleagues and superiors within the agency and individuals in local school districts. This set reflects information sources within the

---

[4]A factor analysis of the 18 items produced four distinct factors, two of which were combined in our analysis to form a single factor. The first factor, institutional, had factor loadings on the four items ranging from .51 to .68. The second factor had two items pertaining to curriculum materials which had loadings of .72 and .80. This factor was combined with the third one, which included three items related to research materials (loadings from .50 to .88), to form a single factor which we labeled paper sources. The final set of three items reflected personal sources and had loadings from .44 to .73.

region and cannot be viewed as representing either the technical or political sector of the environment. The final set is rather unusual. It includes the state department of education, federal agencies, professional associations and regional advisory committees. We consider these to be "institutional sources." These sources provide many different kinds of knowledge. We believe that political knowledge--including information about new regulations and funding opportunities, the potential impacts of such changes on specific schools and districts, and the responses of both districts and professional associations--is a prominent type of knowledge provided.

Field agents turn to personal sources most often, paper sources next, and institutional sources least often (Table 2, items j, k). Of the institutional sources, they turn to the state department most often (not reported). The differences among the three types of roles are significant for two of the three factors: paper and institutional sources. As might be expected, trainers turn to paper sources more often than do monitors. Surprisingly, liaison people turn to istitutional sources most often--indicating again that there is a substantial element of political linkage to their work. One might expect monitors to turn to this source most often, but they probably get the same information through their superiors who interact frequently with the state departments.

We also asked the field agents to describe any particular strategies they employed in creating an interest on the part of school districts for RESA services. From the interviews we identified eight different strategies adopted by RESA staff. Only one, exhibiting an expertise in an activity or content area, showed any differences among pure role types. The trainers who most clearly provide techncial knowledge were the ones who most frequently mentioned a reliance on expertise in order to attract their clients. Three-fifths of the trainers reported using such a strategy while less than one-fifth of the liaison and monitor types mentioned the need to emphasize any particular expertise.

Linkage Patterns by Agency

We have described three kinds of activities carried out by RESA field agents and indicated how these activities promote political and technical linkage. It remains to determine whether RESAs differ in the kinds of linkage they provide. To do so we look at the distribution of scores among the 23 agencies included in the study.

As a first step a one-way analysis of variance was conducted of scores across the 23 agencies. It was assumed that if there were significant between-agency differences, then agency means could be viewed as a measure of agency behavior and not just of individual work. F scores for the analyses of variance were 11.81 for monitoring, 1.77 for training, and 1.20 for the liaison role. Differences among agencies on both training and monitoring were found to be significant at the .05 level. Thus, it is appropriate to speak of the extent to which specific agencies conduct training and monitoring activities.

Examination of the distribution of scores shows two distinct clusters of agencies (Figure 2). The first consists of all the County Offices and

two IUs. These are the agencies that do a great deal of monitoring. The second consists of the two EICs and the remainder of the IUs. These agencies are substantially lower on monitoring. For the most part, the first group does very little training. Only two of these agencies are above the mean for training (4.68). By contrast, most of the second group does a great deal of training. Only three of this group are below the mean. These differences among agencies reflect state policy and, to some extent, regional demand. An explanation of this connection depends on our previous knowledge of events in the two states. The impact of state policies is especially clear in New Jersey. After a series of judicial decisions in the Robinson vs. Cahill case, the New Jersey legislature passed the T&E legislation which made the State Department responsible for

Figure 2 about here

ensuring that each school system provided a Thorough and Efficient Education to children in the district (New Jersey State Board of Education, 1980). At that time Department planners saw two functions to be performed in the field: monitoring to ensure compliance and training to increase districts' capacity to education, especially in those areas specified by law. The decision was made to separate the two functions (Ogden, n.d.). Monitoring procedures, including in many cases the specific forms to be used, were worked out largely within the Department; and the County Offices were assigned the task of implementing them.

Although the training function was given to the EICs, less attention was given to specifying what training would be delivered and how (Josephson and Scharff, 1977). One reason for the greater leeway in the training area was the belief that districts should have considerable autonomy to determine their training needs, that the state had an obligation to offer training but not to mandate it (Ogden, n.d.). Within this context the EICs concentrated on providing training services. The specific services offered were determined largely within the EIC although these decisions were informed by consultation with the state department, annual needs assessments featuring surveys of regional service users, and informal discussions with local clients.

Many of the County Offices were uncomfortable with the monitoring function and sought ways to maintain cordial working relationships with local districts in what was often a tense political atmosphere. Offering training (and liaison services) is one way to maintain such relationships. Apparently, within the time constraints established by heavy monitoring responsibilities, several County Offices are attempting to provide training services directly.

The situation in Pennsylvania is quite different. That state does require that districts follow mandated planning requirements, but these requirements are not as detailed as in New Jersey, nor does Pennsylvania have a minimum competency testing program with sanctions attached to it. IUs do administer special education funds and, as a result, have some monitoring responsibilities in that area. A few other state regulations

affect the linkages IUs offer, but most--such as those governing IU offered in-service programs--facilitate or permit rather than require services. Within these limits, the program of each IU is determined by a board of directors elected from the boards of education of member districts. The program is also influenced substantially by superintendents of schools in the region (Dario, 1976). Thus, the nature of expert/training services offered--and to some extent whether they are offered at all--varies with demand. In fact, the director of one of the two IUs classified with the County Offices indicated that there was very little interest in training and inservice assistance on his district.

Conclusion

Regional Educational Service Agencies are an important source of political and technical linkage for school districts. These linkages are provided through three kinds of activities. Expert/training work emphasizes the provision of technical information, primarily through workshops but also through more intensive consultations. Monitoring entails both the collection of information needed for enforcement purposes and helping districts comply. Unlike the other activities described here, monitoring is conducted for the state acting as a regulator rather than for the district. Liaison work combines both technical and political functions by helping local educators keep abreast of developments outside the region and by putting them in touch with sources of knowledge on both technical matters and regulation as the need arises. While these activities are conceptually distinct, they often appear together. One set may complement the other, especially when new regulation creates the need for new technical knowledge.

The types of activity were identified through an examination of the work of individuals; however their distribution reflects decisions made at both the RESA and the state level. The prevalence of monitoring in the New Jersey County Offices in particular reflects the demands created by the courts and legislature as interpreted by the Department of Education in that state. Legislation and regulation also affect the extent to which these agencies engage in expert/training activities in these two states, but more by setting limits to what is possible than by specifying in detail what services will be performed.

It is apparent that RESAs are serving a useful function in tieing together the national educational system and helping local districts cope with external forces. Whether they will continue to do so depends on decisions made at the state level concerning two issues: funding and regulation. The number of RESAs expanded during the '60s and '70s partly as a result of increased federal funding for education, but an important argument for their existence is that they permit economies of scale. Thus, as funding for education continues to decline, it may be argued that funds should continue to go to RESAs in order to promote the efficient delivery of services. However, in the political debates that determine how declining funds are allocated, strong arguments will be made to keep funds at the

local level. These will be persuasive because there are more local educators than RESA employees and because the public understands the functions of school districts better than those of RESAs. The final decisions will depend in part on which services are maintained. For instance, a continued perceived need for technical linkages to the outside world will support the continuation of RESAs. It will also depend on the extent to which RESAs are seen as useful to local educators.

The regulatory issue is somewhat different. We are entering a period of declining regulation of education as the recent passage of block grant legislation indicates. However, the block grant legislation also moves the responsibility for regulation in some areas from the federal to the state level. To some extent, states can be expected not to take up this regulatory responsibility; but in some areas they may have no choice. Shifts in regulation create both needs for RESA services and dilemmas for RESA management. Insofar as state regulation is increased, there will be an increased need for some sort of political linkage from RESAs. These agencies may also be expected to become directly involved in regulation. This direct involvement can be problematic. While it justifies the continued existence of RESAs, it also undermines their political support when funds are allocated. Moreover, there is some question about how well enforcement and service functions can be combined. For instance, while it may be possible to combine the Cooperator and Powerless Functionary strategies for promoting change in some master plan, it is difficult to imagine combining them in the same position. The future of RESAs will depend large measure on how well they can continue providing services that are deemed important to their clientele, including both political and technical linkage, without becoming involved in unpopular enforcement efforts.

Table 1

Factor Analysis of Eleven Field Agent Roles[1]

(N = 127)

Role Items	FACTOR 1[2] Trainer/Expert	FACTOR 2 Liaison	FACTOR 3 Monitor
Curriculum Expert	.78	.15	-.05
Curriculum Designer	.64	.28	.30
Workshop Presenter	.62	.10	.43
Group Process Trainer	.50	.35	.14
Resource Finder	.08	.65	.08
Needs Assessor/Planner	.15	.59	.15
Coordinator	.21	.54	-.14
Monitor	-.09	-.03	-.67
On-Call Consultant	.22	.40	.15
Proposal Writer	.41	.19	.45
Salesperson	.32	.21	.14

[1] Orthogonal factor analysis with varimax rotation.

[2] Our cutpoint for inclusion in a factor with ± .50.

Table 2

Selected Differences Among Pure-Type Field Agent Roles

CHARACTERISTIC	OVERALL SCORE [1] (N=133)	PURE-TYPE SCORES		
		Trainer (N=17)	Liaison (N=13)	Monitor (N=19)
Content Areas (% who mention):				
a. Curriculum	57	76	38	31
b. Administration	29	29	77	0
c. Legal	61	29	77	88
Activities (% who mention):				
d. Conducting Workshops	66	88	69	44
e. Writing	32	76	31	0
f. Monitoring	43	24	8	81
Intensity				
g. No. Longterm Projects	6.7	10.7	9.2	2.3
Initiation (% of time initiated by):				
h. RESA	35	31	41	25
i. State	19	13	10	38
Knowledge Sources (of item scores):				
j. Paper	13.8	15.5	13.8	10.7
k. Institutional	7.8	8.2	8.6	5.8
Strategies (% who mention):				
l. Expertise	19	59	15	19

[1] The overall score included field agents who were in mixed-as well as pure-type categories. There were five respondents who did not report sufficient data to be included in this analysis.

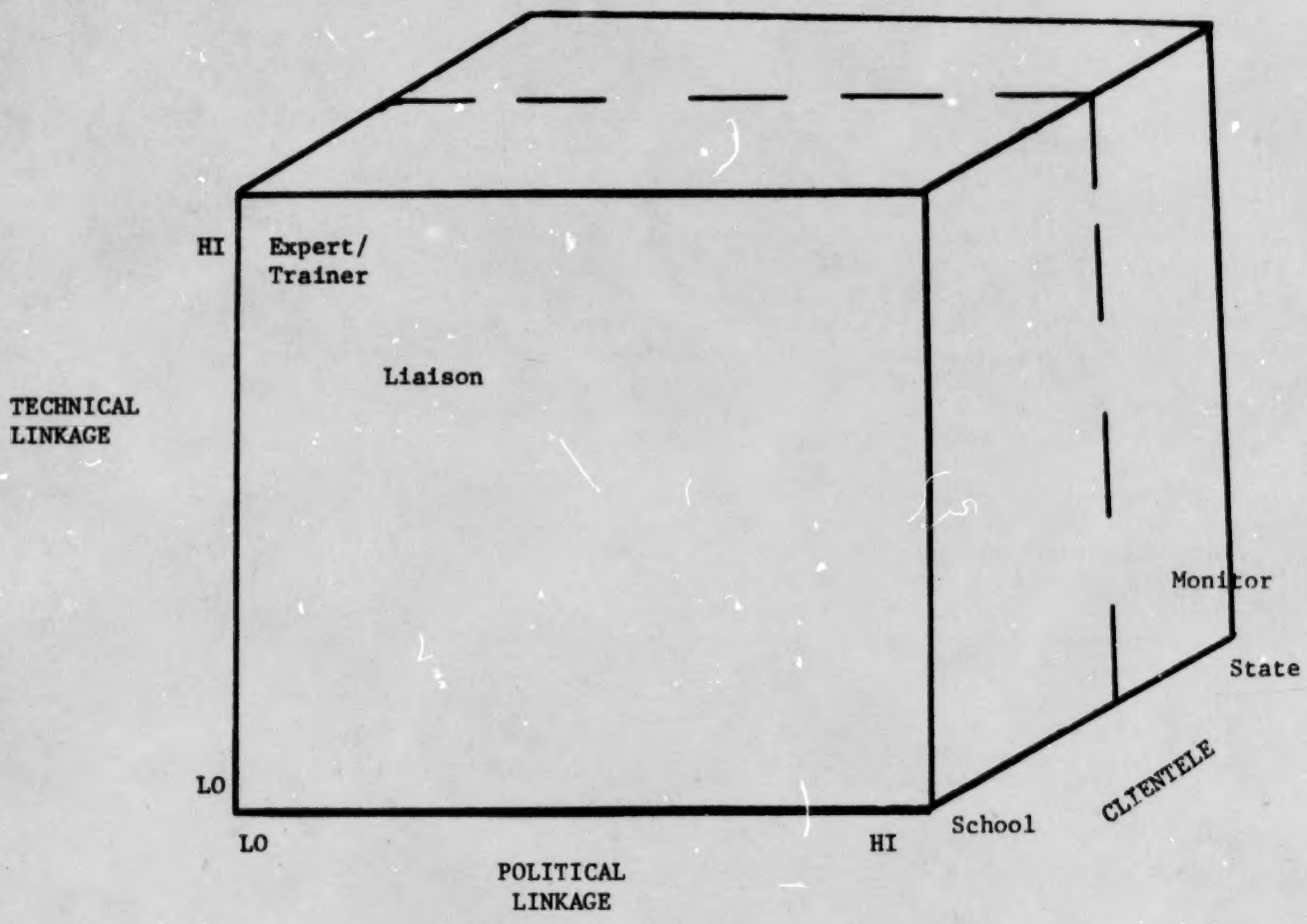

Figure 1. Placement of Role Types with Respect to Kind of Linkage and Clientele

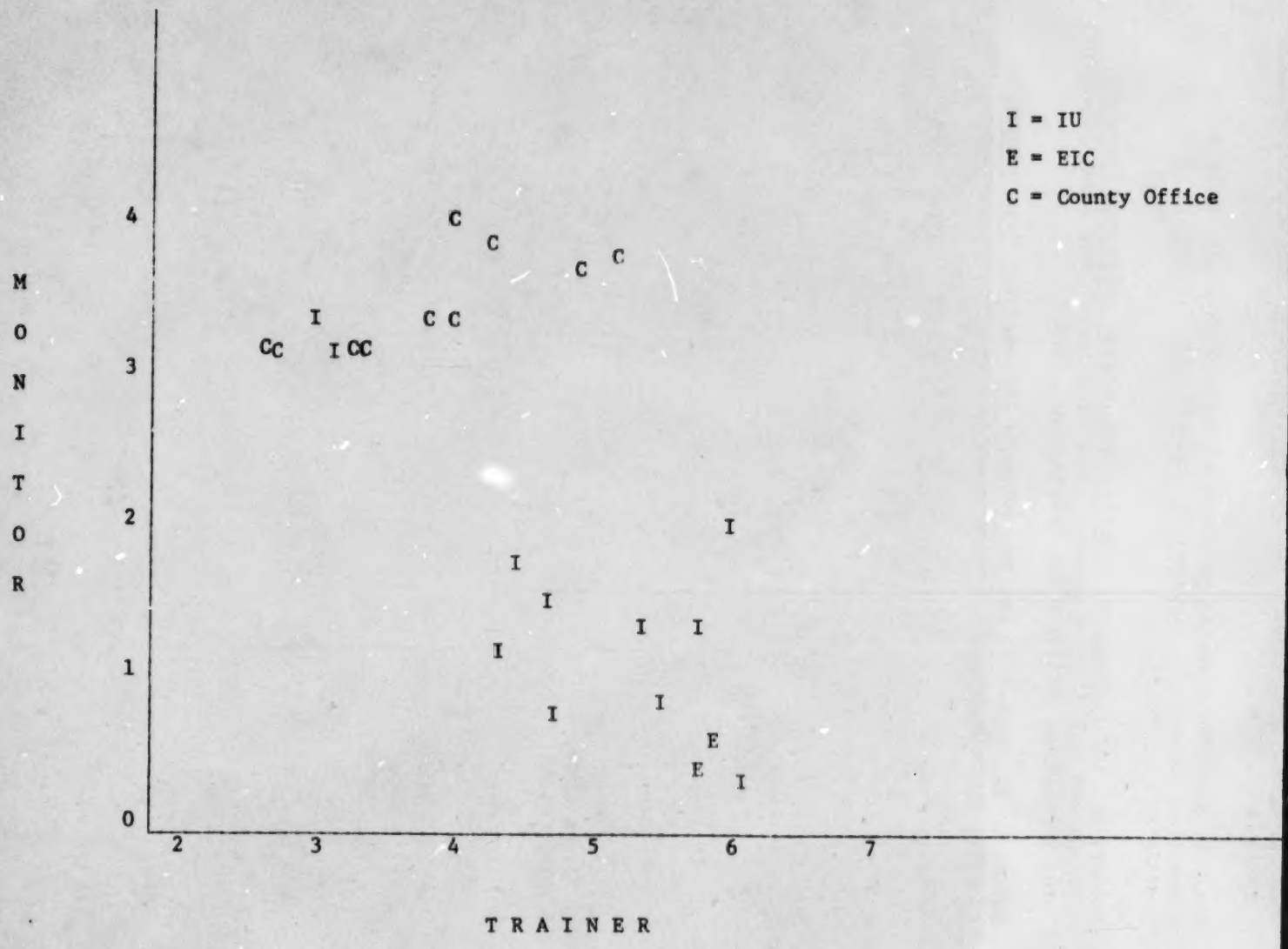

Figure 2. Scattergram of Mean Agency Scores, Monitor x Trainer Activities

REFERENCES

Atkin, J. M., and House, E. R. "The federal role in curriculum development, 1950-1980." Educational Evaluation and Policy Analysis, 1981, 3(5), 5-36.

Boyd, W. L. "The changing politics of curriculum policy making for American schools." Review of Educational Research, 1978, 48(4), 577-628.

Butler, M., and Paisley, W. Factors determining roles and functions of educational linking agents. San Francisco: Far West Laboratory for Educational Research and Development, 1978.

Dario, R. D. Report on the Pennsylvania Intermediate Unit system. Report to Pennsylvania Legislative Budget and Finance Committee, 1976.

Emrick, J. A., and Peterson, S. M. A synthesis of findings across five recent studies in educational dissemination and change. San Francisco: Far West Laborabory for Educational Research and Development, 1978.

Firestone, W. A., and Wilson, B. L. "Helping, enforcing and knowledge use: Problems of system and role design. Philadephia, Pa.: Research for Better Schools, Inc., 1981

Havelock, R. G. Planning for innovation. Ann Arbor, Mich.: Center for Research on Utilization of Scientific Knowledge, University of Michigan, 1969.

Josephson, B., and Scharff, S. "An analysis of T&E implementation." In G. Gappert (Ed.), Organization analysis for staff development. Philadelphia, Penna.: Research for Better Schools, Inc., 1977.

Knezevich, S. J. Administration of public education. New York: Harper and Row, 1969.

Louis, K. S. External agents and knowledge utilization: Dimensions for analysis and action. In R. Lehming and M. Kane, (Eds.), Improving schools: Using what we know. Beverly Hills: Sage, 1981.

Louis, K. S. et al. The human factor in knowledge utilization: Field agent roles in their organizational context. Cambridge, Mass.: Abt Associates, 1981.

Louis, K. S., and Rosenblum, S. The power of the interventions: Products, process and people in the R&D utilization program. AERA paper presentation, Los Angeles, California, 1981.

Madey, D. L. "A study of the relationships among educational linker roles and selected linker functions." Ph.D. dissertation, Duke University, 1979.

McLaughlin, M. W. "Implementation as mutual adaption: Change in classroom organization." In D. Mann (Ed.), Making change happen? New York: Teachers College Press, 1978.

Murphy, J. T. "Title I of ESEA: The politics of implementing federal education reform." Harvard Educational Review, 1971, 41(1), 35-62.

Murphy, J. T. "The state role in education: Past research and future directions." Educational Evaluation and Policy Analysis, 2(3), 1980, 39-51.

New Jersey State Board of Education. The New Jersey Public Education Act of 1975: An evaluation, Volume 1. Trenton, N.J.: New Jersey Department of Education, 1980.

Ogden, E. H. "The T&E organizational system in New Jersey and its relation to research and development." In G. Gappert (Ed.), Organization analysis and staff development. Philadelphia, Penna.: Research for Better Schools, Inc., no date.

Orfield, G. The reconstruction of southern education. New York: Wiley, 1969.

Pauly, E. "The decision to innovate: Career pursuit as an incentive for educational change." In D. Mann (Ed.), Making change Happen? New York: Teachers College Press, 1978.

Schein, E. H. Process consultation: Its role in organization development. Reading, Mass.: Addison-Wesley, 1969.

Sieber, S. D. "Images of the practitioner and strategies of educational change." Sociology of Education, 45( ), 1972, 362-385.

Sieber, S. D., Louis, K. S., and Metzger, L. The use of educational knowledge: Evaluation of the pilot state dissemination program, Volumes I and II. New York: Bureau of Applied Social Research, 1972.

Stephens, E. R. "Education Service Agencies: Status and trends." Burtonsville, Md.: Stephens Associates, 1979.

Weiss, C. H., and Bucuvalas, M. J. "Truth tests and utility tests. American Sociological Review, 1980, 45(2), 302-312.

Welch, W. W. "Twenty years of science curriculum development: A look, back." In D. C. Berliner (Ed.), Review of Research in Education, Volume 7. Washington, D.C.: American Educational Research Association, 1979.

Wirt, F. M. "School policy culture and state decentralization. In J. D. Scribner (Ed.), The politics of education: The Seventy-Sixth Yearbook of the National Society for the Study of Education. Chicago: University of Chicago Press, .

Wise, A. E. Legislated learning: The bureaucratization of the American classroom. Berkeley: The University of California Press, 1979.

Yin, R. K., and Gwaltney, M. K. Organizations collaborating to improve educational practice. Washington, D.C.: Abt Associates, 1981.